

PCT

WELTOORGANISATION FÜR GEISTIGES EIGENTUM

INTERNATIONALE ANMELDUNG VERÖFFENTLICHT NACH DEM VERTRAG ÜBER DIE
INTERNATIONALE ZUSAMMENARBEIT AUF DEM GEBIET DES PATENTWESENS (PCT)



P

(51) Internationale Patentklassifikation ⁷ : H04Q 7/38		A1	(11) Internationale Veröffentlichungsnummer: WO 00/13445
			(43) Internationales Veröffentlichungsdatum: 9. März 2000 (09.03.00)
(21) Internationales Aktenzeichen: PCT/DE99/02696		(81) Bestimmungsstaaten: CN, JP, US, europäisches Patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).	
(22) Internationales Anmeldedatum: 27. August 1999 (27.08.99)			
(30) Prioritätsdaten: 198 39 016.5 27. August 1998 (27.08.98) DE		Veröffentlicht <i>Mit internationalem Recherchenbericht. Vor Ablauf der für Änderungen der Ansprüche zugelassenen Frist; Veröffentlichung wird wiederholt falls Änderungen eintreffen.</i>	
(71) Anmelder (<i>für alle Bestimmungsstaaten ausser US</i>): SIEMENS AKTIENGESELLSCHAFT (DE/DE); Wittelsbacherplatz 2, D-80333 München (DE).			
(72) Erfinder; und (75) Erfinder/Anmelder (<i>nur für US</i>): DZUBAN, Stanislav (AT/AT); Engerthstrasse 257/1/10, A-1020 Wien (AT). FÖLL, Uwe (DE/DE); Kiebler Strasse 2, D-14612 Falkensee (DE). ERFURT, Frank (DE/DE); Am Wall 50, D-14532 Kleinmachnow (DE). LEITGEB, Manfred (AT/AT); Feldgasse 64, A-2440 Granatneusiedl (AT). NIEPEL, Alexander (DE/DE); Lindwurmstrasse 98A, D-80337 München (DE). REIMER, Uve (DE/DE); Grabensprung 141 A, D-12683 Berlin (DE). SCHENDEL, Jens (DE/DE); Barfußstrasse 26, D-13349 Berlin (DE).			
(74) Gemeinsamer Vertreter: SIEMENS AKTIENGESELLSCHAFT; Postfach 22 16 34, D-80506 München (DE).			
(54) Titel: METHOD AND MOBILE COMMUNICATION SYSTEM FOR CONTROLLING A CONNECTION SETUP			
(54) Zeichnung: VERFAHREN UND MOBIL-KOMMUNIKATIONSSYSTEM ZUR STEUERUNG EINES VERBINDUNGSAUFBES			
(57) Abstract			
<p>According to the invention, a subscriber call number profile (R-CSI) with call numbers (No1, No2) generally valid for all registered mobile subscribers is additionally stored in the subscriber data base (HLR) of a home mobile radio network (HPLMN) and co-transmitted in the location update for storage in the corresponding subscriber database (VLR) when the relevant subscriber roams to a visitor mobile radio network (VPLMN). Additionally, when an outgoing connection from a communication terminal is initiated by a target call number (CldPA) dialed by the mobile subscriber in the visitor mobile radio network (VPLMN), the switching center (MSC) compares the call numbers (No1, No2) in the call number profile (R-CSI) with the target call number (CldPA) and establishes a connection to a service control point (SCP) in case of a match, which then converts the co-transmitted target call number (CldPA) into a new target call number (CldPA*) and sends it to the switching center (MSC) for further connection setup.</p>			

The diagram illustrates the mobile communication system for controlling a connection setup. It shows the interaction between the Home Public Land Mobile Network (HPLMN) and the Visitor Public Land Mobile Network (VPLMN).
In the HPLMN, an SCP (Service Control Point) and SL (Service Location) are connected to a HLR (Home Location Register). The HLR contains a table with subscriber information, including a call number profile (R-CSI) with entries for No1: 1234 and No2: 37367. A LUP (Location Update Procedure) is shown, with step (1) being the LUP (R-CSI) and step (5) being the transmission of CldPA = +49 172 66666.
In the VPLMN, an MSC (Switching Center) and VLR (Visitor Location Register) are connected. The VLR also contains a table with subscriber information, including the R-CSI profile. A call is initiated from a mobile station (MS) to the MSC. The MSC compares the dialed target call number (CldPA) with the R-CSI profile. If a match is found (e.g., CldPA = 1234), the MSC sends a query to the SCP (step 4, SCP-Q (CldPA = 1234)). The SCP then performs a conversion (step 6, CldPA*) and sends the new target call number back to the MSC (step 2, SU (CldPA = 1234)). The MSC then establishes a connection to the MS (step 3, IN-Trigger CldPA = 1234).
A legend indicates: CON (Connection), HLR (Home Location Register), VPLMN (Visitor Public Land Mobile Network), HPLMN (Home Public Land Mobile Network), SCP (Service Control Point), SL (Service Location), MS (Mobile Station), and VLR (Visitor Location Register).